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PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :  
:   
Yukihiro MATSUMOTO et al. :  
:   
Serial No.: 09/883,266 :  
:   
Filed: June 19, 2001 :  
:   
For: PRODUCTION PROCESS FOR WATER- :  
: ABSORBENT RESIN :  
:

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to calculating the filing fee and prior to examination, please amend the above-identified application as follows.

**IN THE SPECIFICATION:**

Please delete the specification as originally filed and insert the Substitute Specification appended hereto.

**IN THE CLAIMS:**

Please amend claims 1-9 as follows.

1. (Amended) A process for producing a water-absorbent resin, which comprises the step of polymerizing at least one monomer component including acrylic acid and/or its salt as major components to produce a water-absorbent resin that is a neutralized salt, with the process being characterized in that the acrylic acid is a product obtained by catalytic gas phase oxidation

of propylene and/or propane and has a protoanemonin content of not more than 10 ppm, and in that the resultant water-absorbent resin has a neutralization of not less than 50 mol%.

2. (Amended) A process according to claim 1, wherein the acrylic acid has a furfural content of not more than 10 ppm.

3. (Amended) A process according to claim 1, which further comprises the step of subjecting the acrylic acid to an alkali treatment followed by the polymerization step.

4. (Amended) A process according to claim 1, wherein the alkali treatment is a strong-alkali treatment such that the resultant neutralization ratio of the acrylic acid will be more than 100 mol%.

5. (Amended) A process according to claim 1, wherein the polymerization is aqueous solution polymerization.

6. (Amended) A process according to claim 1, which further comprises the step of crosslinking the vicinity of the surface of the water-absorbent resin.

7. (Amended) A process according to claim 1, wherein the resultant water-absorbent resin has a water absorption capacity of not less than 25 g/g under a load (of about 1.96 kPa).

8. (Amended) A process for producing a water-absorbent resin, which comprises the step of polymerizing at least one component including acrylic acid and/or its salt as major components to produce a water-absorbent resin that is a neutralized salt, with the process being

characterized in that the acrylic acid used as a raw material is a product being obtained by catalytic gas phase oxidation of propylene and/or propane and containing an aldehyde, and further characterized by further comprising the step of subjecting the raw acrylic acid to a strong-alkali treatment followed by the polymerization step.

9. (Amended) A process according to claim 8, wherein the strong-alkali treatment is carried out at a temperature of not lower than 40°C.

#### **REMARKS**

The present Amendment revises the original claims to remove the improper multiple dependency of the claims, and to identify the claims by the correct claim number.

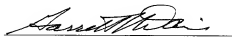
This application was originally filed in a non-English language. Filed concurrently herewith is a verified English translation of the Japanese language specification as originally filed.

Appended hereto is a Substitute Specification to revise the specification to conform to the appropriate format for examination and publication. In particular, the Substitute Specification moves the claims to the end of the specification and inserts appropriate headings. The Substitute Specification does not contain new matter. Also appended hereto is a marked-up

copy of the verified English translation indicating the changes pursuant to 37 C.F.R. 1.125(b).

Accordingly, Applicants request the Substitute Specification be accepted.

Respectfully submitted,



Garrett V. Davis

Reg. No. 32,023

Roylance, Abrams, Berdo & Goodman, L.L.P.  
1300 19<sup>th</sup> Street, N.W., Suite 600  
Washington, D.C. 20036  
(202) 659-9076

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